Amendments to the Specification:

Please replace the paragraph spanning page 6, lines 8-10 with the following amended paragraph:

A receiver in which the smoothing of channel estimates is adapted separately for per ray channel estimation according to the above-incorporated application is shown in FIG. 5, and channel estimation may be performed as in FIG. 6. The arrangement of FIG. 5 includes a per-ray, asymmetrical smoothing filter synthesizer 20, and a per-ray asymmetrical smoothing filter 21.

Please replace the paragraph spanning page 6, lines 20-25 with the following amended paragraph:

It is well known that a receiver AFC provides an estimate of the local crystal reference oscillator's error relative to the remote transmitter, and that this AFC estimate can be used to correct the crystal oscillator in order to correct the local transmitter frequency, as shown in FIG. 7. The arrangement depicted in FIG. 7 includes a frequency error estimator 18. However, past attempts to ascribe observed variations in the received signal in part to Doppler channel variation via a channel estimate and in part to a crystal frequency error were inaccurate, as the channel estimate absorbed part of the frequency error.

Please replace the paragraph spanning page 17, line 23 through page 18, line 2~~ [20]~~ with the following amended paragraph:

FIG. 13 is similar to FIG. 12, except that the inner loops are separate for each multipath ray. In this embodiment, there is one NCO per ray, NCO 720-1, . . ., NCO 720-n. Likewise, there are per-ray inner loop integrators (510-1, . . ., 510-n) and a per-ray ARCTAN circuit, which is now generalized to low pass filter 507a-1, . . ., 507a-n and Cartesian-to-polar converter 507b-1, ..., 507b-n. The Cartesian-to-polar converter produces both an angle output and a signal strength output. The signal strength output can be related to the amplitude of the differential phase discriminator output, which is in turn related to the power of a ray. The